



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/897,647	06/29/2001	Alan Chris Berkema	10016786-1	9755

7590 08/27/2007  
HEWLETT-PACKARD COMPANY  
Intellectual Property Administration  
P.O. Box 272400  
Fort Collins, CO 80527-2400

EXAMINER
----------

COLES, EDWARD L

ART UNIT	PAPER NUMBER
----------	--------------

2625

MAIL DATE	DELIVERY MODE
-----------	---------------

08/27/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.



UNITED STATES DEPARTMENT OF COMMERCE

U.S. Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

APPLICATION NO./ CONTROL NO.	FILING DATE	FIRST NAMED INVENTOR / PATENT IN REEXAMINATION	ATTORNEY DOCKET NO.
---------------------------------	-------------	---	---------------------

09/897,647

EXAMINER
----------

Poon

ART UNIT	PAPER
----------	-------

2625

20070822

DATE MAILED:

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner for Patents

Examiner's answer with corrections to the status of claim section and the Evidence Relied Upon section.

KING Y. POON  
SUPERVISORY PATENT EXAMINER



UNITED STATES PATENT AND TRADEMARK OFFICE

---

Commissioner for Patents  
United States Patent and Trademark Office  
P.O. Box 1450  
Alexandria, VA 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 09/897,647  
Filing Date: June 29, 2001  
Appellant(s): BERKEMA ET AL.

**MAILED**

**AUG 27 2007**

**Technology Center 2600**

---

Steven P. Fallon  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 4/11/2006 appealing from the Office action mailed 10/4/2005.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The following are the related appeals, interferences, and judicial proceedings known to the examiner which may be related to, directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal:

Appeal brief filed for application 09/897,693 and 09/897,656.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The statement of the status of claims contained in the brief is incorrect. A correct statement of the status of the claims is as follows:

Claims pending, finally rejected and appealed 1-5, 7-21, 23-35.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

EP 0893760	Eldridge	1-1999
6,452,689	Srinivasan	9-2002
6,772,338	Hull	8-2004
6,400,272	Holtzman et al	6-2002
6,379,058	Petteruti et al	4-2002
6,184,996	Gase	2-2001
5,915,214	Reece et al	6-1999
6,842,460	Olkkonen et al	1-2005

Simple Object Access Protocol (SOAP) 1.1, WSC Note, 5/8/2000

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Eldridge (EP 0893760).

Regarding claim 1, Eldridge et al. teach a method for serving a print by reference operation to print referenced content from a referenced location of a content provider to a print device (fig 4 & column 11, line 52 - column 12, line 7 a method for context-based transactions with tokens, i.e. references, between a portable device and a network), the method comprising steps of: accepting (fig 4, step s8", accepting a token, i.e. accepting a reference) from a print client (fig 1, PDA 2), a reference to print content targeted for printing from a content provider location indicated by the reference (column 9:line 44 - column 10, line 2, & column 8, lines 6-7, token/reference contains a URL for retrieval of a document located at address of URL); resolving the reference to determine the

location indicated by the reference (fig 4, step s15 and column 12, lines 54-58, token/reference is decoded to determine URL), obtaining print data from the location indicated by the reference (fig. 4, step s16, document data is retrieved using URL provided by token/reference); transcoding the print data into a print device ready format (fig 4, step s18, print data is converted to a format that matches printer capability); allowing access to print data transcoded by said step of transcoding (fig 4, step s19, access to converted print data is allowed because it has been sent to the printer); transferring, in response to a request from the print client, print data transcoded by said step of transcoding (fig 4, step s19, print data is transferred, which is a result of the initial request from PDA 2 to the network).

Regarding claim 2, Eldridge et al. teach the method according to claim 1, wherein said step of accepting accepts the reference from an Internet connection to the print client (column 8; lines 2-5, a referenced document is processed by way of the internet).

Regarding claim 3, Eldridge et al. teach the method according to claim 1, wherein the reference comprises a universal resource locator address that addresses print content targeted for printing (column 8, lines 57-58, document identifier comprises a URL).

Regarding claim 4, Eldridge et al. teach the method according to claim 1, wherein said step of accepting accepts a reference list of individual references that each reference print content stored at a content provider location (column 3, line 53 - column 4, line 2 recites a method of decoding a token with multiple references to documents stored at other locations, column 8, lines 6-7, referenced by a URL).

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Eldridge et al (EP 0893760).

Regarding claim 5, Eldridge et al. teach the method according to claim 4, wherein said steps of resolving, obtaining, transcoding, and allowing are completed for individual references, but do not explicitly teach wherein said steps of resolving, obtaining, transcoding, and allowing are completed for a first one of said individual references in said reference list before being conducted for another one of said individual references in said reference list.

However, serial and parallel processing are well-known in the art, therefore an inventor skilled in the art would combine the token with multiple references taught by Eldridge et al. with serial processing because it allows the retrieval of multiple documents to be accomplished.

Claims 7, 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eldridge et al (EP 0893760) in view of Petteruti et al (US 6,379,058), W3C SOAP 1.1 and Gase (US 6,184,996).

Regarding claims 7 & 8, Eldridge et al. teach the method according to claim 1 (please see discussion of claim 1), wherein the print client initiates control communication (5g 5, step s2), but does not teach the method further comprising a step (emphasis added) of initiating a control communication with the print client.

However, Petteruti et al. teach a step of initiating a control communication with the print client (column 6:lines 24-25).

Accordingly, it would have been obvious to one skilled in the art at the time of the invention to have used the control communication initiated with the print client as taught by Petteruti et al. in the method of Eldridge et al. because it provides a method for additional functionality wherein the portable device is not the only device that initiates control communication.

Eldridge et al. & Petteruti et al. also does not teach wherein said step of initiating a control communication is conducted via the Simple Object Access Protocol, an argument resolution protocol, and said steps of accepting and transferring are conducted via the HUP protocol, a data transfer protocol.

However, W3C teaches the Simple Object Access Protocol (SOAP) (page 5, section 2, W3C teaches using SOAP for transmissions between a sender and a receiver, in this case a control communication initiator and the print client).

Accordingly, it would have been obvious to one skilled in the art at the time of the invention to have used the SOAP taught by W3C to initiate control communication in the method taught by Eldridge et al. & Petteruti et al. because (W3C, page 26, section 6, SOAP can be binded to HTTP, providing the advantage of being able to use the formalism and decentralized flexibility of SOAP with the rich feature set of HTTP.

Additionally Gase teaches a HTTP protocol used for data transfer in a print-by-reference system similar to that taught by Eldridge et al. (column I, lines 26-35).



Accordingly, it would have been obvious to one skilled in the art at the time of the invention to have used the HTTP protocol taught by Gase in the method taught by Eldridge et al., Petteruti et al. & W3C, because it allows for data transfer over the World Wide Web (Gase, column 11, lines 27-29), and it would compliment the use of the SOAP.

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Eldridge et al. (EP 0 893 760) & Holtzman et al. (US 6,400,272).

Regarding claim 9, Eldridge et al. teach the method according to claim 1, but do not teach the method further comprising steps of: accepting a security challenge from the location indicated by the reference; and responding to the security challenge.

However, Holtzman et al. teach a security challenge method for accessing requested information over a network connection, wherein, column 13, lines 30-31, a security challenge from the location indicated by the referenced information is accepted by the client, and responding to the security challenge involves prompting the resolve of the PIN request to the user.

Accordingly, it would have been obvious to one skilled in the art at the time of the invention to have used the secure access method taught by Holtzman et al. in the document/information retrieval system taught by Eldridge et al. because it would provide authentication access for secure document access in the Eldridge et al system.

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Eldridge et al. (EP 0 893 760) & Holtzman et al. (US 6 400 272) as applied to claim 9 above, and further In view of Hull (US 6 772 338).

Regarding claim 10, Eldridge et al. & Holtzman et al. teach the method according to claim 9.

Additionally, Holtzman et al. teach the concept of passing the security challenge (i.e. PIN request mentioned above in claim 9 rejection) to the request, but Eldridge et al. do not teach wherein said step of responding comprises passing the security challenge on to the print client.

However, Hull teaches a method (fig 2) wherein information is passed from an office appliance 201 (i.e. the workstation 50 taught by Eldridge et al.) to a shuttle memory service 202 (i.e. PDA 2 taught by Eldridge et al.).

Accordingly, it would have been obvious to one skilled in the art at the time of the invention to have used the method of information transfer taught by Hull in the method for secure document retrieval taught by Eldridge et al. & Holtzman et al. because it would provide a method to forward the PIN request taught by Holtzman et al. to the user of the PDA taught by Eldridge et al.

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Eldridge et al. (EP 0 893 760) & Iwata (US 6 778 289) & Hull (US 6 772 338).

Regarding claim 11: Eldridge et al. teach the method according to claim 1, but do not teach wherein said step of allowing comprises: establishing a universal resource

Art Unit: 2625

locator address for the print data transcoded by said step of transcoding; and communicating the universal resource locator address for the print data to the print client.

However, Iwata teaches establishing a universal resource locator address for the print data that the server system manages, and communicating the universal resource locator address for the print data to a print client (column 5, lines 50-56, server defines URL for documents it manages and sends it to a print client).

Accordingly, it would have been obvious to one skilled in the art at the time of the invention to have used the Iwata method for defining a URL of each document managed by a print server in the method for document retrieval taught by Eldridge et al. because it would define a URL for the transcoded document that the server system manages, allowing for other devices, i.e. print clients, to access the document using the URL.

Furthermore, Eldridge et al. do not teach said step of sending the URL to the print client.

However, Hull teaches a method (fig 2) wherein information is passed from an office appliance 201 (i.e. the workstation 50 taught by Eldridge et al.) to a shuttle memory service 202 (i.e. PDA 2 taught by Eldridge et al.).

Accordingly, it would have been obvious to one skilled in the art at the time of the invention to have used the method of information transfer taught by Hull in the method for URL document retrieval taught by Eldridge et al. & Iwata. because it would provide a method to forward the URL taught by Iwata to the user of the PDA taught by Eldridge et al.

Claims 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eldridge et al. (EP 0 893 760) & Srinivasan (US 6 452 689).

Regarding claim 12, Eldridge et al. teach the method according to claim 1, but do not teach the method further comprising a step of conducting a financial clearance.

However, Srinivasan teaches a method further comprising a step of conducting a financial clearance (column 3, lines 48-65, billing system 19 verifies financial clearance and debits the account, i.e. billing ID).

Accordingly, it would have been obvious to one skilled in the art at the time of the invention to have used the billing method taught by Srinivasan in the method for document processing and retrieval taught by Eldridge et al. because it allows for billing of the service to the user.

Regarding claim 13, Eldridge et al. teach the method according to claim 1, but do not teach the method further comprising a step of requiring a billing ID from the print client.

However, Srinivasan teaches a method further comprising a step of requiring a billing ID from the print client (column 3, lines 48-65, billing system 19 verifies financial clearance and debits the account, i.e. billing ID).

Accordingly, it would have been obvious to one skilled in the art at the time of the invention to have used the billing method taught by Srinivasan in the method for document processing and retrieval taught by Eldridge et al. because it allows for billing of the service to the user.

Claims 14, 16, 23-29, 32 & 34-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over the rejections for claims 1-13 set forth above.

Regarding claims 14, 16, 23-29, 32 & 34-35, Eldridge et al teach the methods taught in claims 1-5, 7-13, but do not explicitly teach that the methods are realized as a computer program product comprising a computer usable medium having computer readable program code embodied in the medium.

However, it is well-known in the art to apply computer program products to methods and it is therefore obvious that the method taught by Eldridge et al. could be implemented in a computer product.

Note: claim 26 is rejected using Eldridge and Petteruti as discussed in claim 7.

Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Eldridge et al. (EP 0 893 760).

Regarding claim 15, Eldridge et al. teach the print service according to claim 14, wherein the reference is accepted from a direct connection to the print client (fig 1, PDA 2 uses RF or IR to make a direct connection).

Claims 17-19 & 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eldridge et al. (EP 0 893 760) & Srinivasan (US 6 452 689).

Regarding claim 17, Eldridge et al. teach the print service according to claim 14, wherein the Internet is used for the print service (column 8, lines 2-52, but they do not

teach wherein the print service is a web site allowing the print service to be reached by the print client via the Internet.

However, Srinivasan teaches a print service as a web site allowing the print service to be reached by the print client via the Internet (fig 1, web site 11).

Accordingly, it would have been obvious to one skilled in the art at the time of the invention to have used the web print service taught by Srinivasan in the system taught by Eldridge et al. because it provides an effective system for printing document over the internet and it allows for billing of the service to the user.

Regarding claim 18, the claim rejection of claim 17 is representative of claim 18. See Srinivasan teachings wherein the web site is discoverable by the print client through the Internet (fig 1 and column 12, lines 56-62, users discover the web site via the internet).

Regarding claim 19, the claim rejection of claim 18 is representative of claim 19. See Srinivasan teaches wherein the web site is pre-configured into print clients to be discoverable when print services are required by the print clients (fig 1, users 10 discover the Web site via the data network 12).

Regarding claim 21, the claim rejection of claim 18 is representative of claim 21. See Eldridge et al. teaches wherein the service is discoverable via network discovery protocols (fig 5, steps s2'-s7').

Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Eldridge et al. (EP 0 893 760) & Srinivasan (US 6 452 689) as applied to claim 18 above, and further in view of Olkkonen et al. (US 6 842 460).

Regarding claim 20, teach the print service according to claim 18, but do not teach a service registry to be discoverable by print clients.

However, Olkkonen et al. teach a discoverable service registry (figs 5, service registry).

Accordingly, it would have been obvious to one skilled in the art at the time of the invention to have used the service registry taught by Olkkonen et al. in the web print service taught by Srinivasan & Eldridge et al. because it provides an effective system for registering services for a user near a network

Claims 30-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eldridge et al. (EP 0 893 760) & Petteruti et al. (US 6 379 058) & W3C (Simple Object Access Protocol (SOAP) 1.1) & Gase (US 6 184 996).

Regarding claim 30, the claim rejections for claim 27 are represented in claim 30. See Gase wherein the control communications create a new print job (column 3, lines 6-92), check status of an existing print job (fig 2, printer jobs list); and cancel an existing print job (fig 4, printer job detail with CANCEL button 62).

Regarding claim 31, the claim rejections for claim 30 are represented in claim 31. See Gase wherein the print service accepts a request to create a new print job from the print client (column 3, lines 6-9).

Claim 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over Eldridge et al. (EP 0 893 760) & Hull (US 6 772 338) & Reece et al. (US 5 915 214).

Regarding claim 33, Eldridge et al. teach the print service according to claim 14. Eldridge et al. do not teach said step of sending any document to the print client.

However, Hull teaches a method (fig 2) wherein information is passed from an office appliance 201 (i.e. the workstation 50 taught by Eldridge et al.) to a shuttle memory service 202 (i.e. PDA 2 taught by Eldridge et al.).

Accordingly, it would have been obvious to one skilled in the art at the time of the invention to have used the method of information transfer taught by Hull in the method for document retrieval taught by Eldridge et al. because it would provide a method to forward the document to the user of the PDA taught by Eldridge et al.

Additionally, Eldridge et al. do not teach wherein transcoding is done into a form that depends on a device type of the print client.

However, formatting information for compatibility in mobile devices is taught by Reece et al. (column 7, lines 12-20).

Accordingly, it would have been obvious to one skilled in the art at the time of the invention to have used the compatibility formatting function as taught by Reece et al. to send information to clients in the system for retrieving a document and sending it to a client as taught by Eldridge et al. and Hull, because it would assure that the document could be sent to the PDA without compatibility error.



**(10) Response to Argument**

Appellant, on page 5-7, argues that Eldridge does not teach printing referenced content from a content provider location or accepting a reference to a content provider location from a print client because Eldridge's document server is not a content provider. Appellant further, on the bottom of page 7 and page 8-9 argues that the document server is not a content provider because the document server stores a user's own document. A content provider is not a server that stores a user's own document (according to Appellant).

In response: The examiner disagrees that a content provider cannot store the user's own document. Applicant disclosed the content provider as Website 18 of fig. 1 on the Internet, see page 5, line 9, applicant's specification. The examiner interprets the Website 18 as a server computer that serves a document to a client that requested the document. The website 18 of the present invention is similar to the file server 52, of column 12, lines 54-55, Eldridge. Furthermore, column 1, lines 30-35, Eldridge clearly teaches documents are distributed from one person to another. In other words, Eldridge teaches the document that is being stored and sent to a user by the file server 52 could be a document from another person (not document from the same user).

Therefore, Eldridge teaches printing referenced content (document retrieved, column 4, lines 5-20) from a content provider location (the location of the repository, column 4, lines 9-11, also see column 8, lines 1-10, column 9, lines 45-58, column 12, lines 45-58) or accepting a reference (accepted by the repository/file server to decode

the token, column 12, lines 55-58) to a content provider location from a print client (workstation 50, column 13, lines 1-5).

Appellant, on page 11-16, argues that there are no motivations to combine Eldridge, Petteruti, Gase and SOAP.

In response: Eldridge's invention is being used through Internet. It is general knowledge in Internet communication art that in order for devices to communicate, certain Internet communication protocol is to be followed. Eldridge does not get into the details of Internet communication protocol because Internet communication protocol standard exist and is very easy to obtain by one with ordinary skill in the art in order to made use of Eldridge invention.

Gase's reference is in the same area of retrieving document from a remote computer (12, fig. 1); located on Internet, by a printing device (14, fig. 1) using print by reference method (column 3, lines 15-30).

Gase, column 1, lines 10-35 (also see HTTP at 20 and 26 of fig. 1) states: the INTERNET and its associated WWW are WELL-KNOWN and ESTABLISHED communication networks. Increasingly, business applications are employing the WWW to transfer PRINT JOB from client processors to network printers that are remotely located. A significant feature of the WWW is that it offers a COMMON INTERFACE which enables computing devices that are controlled by different operating system platforms to COMMUNICATE and to be UNDERSTOOD by each other. This communication capability arises as a result of each of the operating system platforms

Art Unit: 2625

having program modules which enable the devices to communicate via the COMMON MESSAGE PROTOCOL USED OVER THE WWW.

The PROTOCOL is termed HTTP. HTTP provides a way for WWW clients and servers to communicate, primarily through the exchange of messages that are BRIEF and DIRECT. HTTP employs specific message categories, i.e., a "CONNECTION"; a "REQUEST;" a "RESPONSE"; and a "CLOSE". A connection is a message which occurs as a client tries to connect to a specific Web server.

Therefore, column 1 of Gase provides reasons and motivation of combining Eldridge; for example: 1) Internet connects computing device that are controlled by different operating system; in order for those machines communicate, an Internet communication protocol must be used; 2) Although Eldridge does not identify an communication protocol, his invention must use an Internet communication protocol; user must rely on other well-known Internet communication protocol in the same working environment as Eldridge in order to make use of Eldridge's invention; 3) Gase teaches HTTP is an a COMMON INTERFACE which enables computing devices that are controlled by different operating system platforms to COMMUNICATE and to be UNDERSTOOD by each other over WWW/Internet; 4) Gase's working environment is very similar to Eldridge's working environment; 5) even user of Eldridge is an EXPERT, having a lot of money and time and effort to invent his own communication protocol (such communication protocol probably would not have been invented by a person with ordinary skill in the art), those protocol must also be agreed upon by other computer/software manufacturer; HTTP is an communication protocol already agree

upon by all computer/software manufacturer in the world such that their devices would be able to communicates with other devices on Internet, 5) Therefore, the examiner concludes it would have been obvious for a person with ordinary skill in the art to rely on HTTP communication protocol to be used in combine with Eldridge's invention.

Note: HTTP is a data transfer protocol (claim 8). The accepting and transferring steps of claim 7 are conducted via HTTP's (data transfer protocol) is suggested by Gase column 1 as previously discussed, by accepting the request message of HTTP of column 1, lines 35-40 Gase, and transferring the requested data using the response message of HTTP of column 1, lines 40-43, Gase.

Abstract of SOAP 1.1, page 1, states: SOAP is a lightweight protocol for exchange information in a decentralized, distributed environment (an environment of Eldridge). It is an XML based protocol that consists of three part: an envelope that defines a framework for describing what is IN A MESSAGE (the message of HTTP, column 1, Gase) and how to PROCESS it, a set of encoding rules for expressing instances of application-defined datatypes, and a convention for representing remote procedure calls and response. SOAP can potentially be used in combination with a variety of other protocols; however, the ONLY BINDINGS defined in this document describe HOW TO USE SOAP in combination with HTTP and HTTP Extension Framework.

Therefore, the SOAP 1.1 is suggesting to use SOAP in combination with HTTP. SOAP using tons of money and effort of experts (in Internet communication) in

designing SOAP to be used in combine with HTTP clearly has advantage of doing so.

User's using what is taught by SOAP would benefit from the design and effort of SOAP.

Furthermore, the section "using SOAP in HTTP" of page 26, SOAP 1.1, states:  
Binding SOAP to HTTP provides the advantage of being able to use the formalism and decentralized flexibility of SOAP with the rich feature set of HTTP.

Note: initiating a control communication with the print client would be conducted through the use of "request" and "response" of HTTP, column 1, lines 30-32, column 1, lines 40-47, Gase.

SOAP 1.1, page 5, section 2 states: SOAP messages are fundamentally one-way transmissions form a sender to a receiver, but as illustrated above, SOAP messages are often combined to implement patterns such as request/response. SOAP implementations can be OPTIMIZED to EXPLOIT the unique characteristics of particular network systems. For example, the HTTP binding described in section 6 provides for SOAP response messages to be delivered as HTTP responses, using the same connection as the inbound request.

Therefore, SOAP 1.1 is suggesting the use of SOAP with the "request" and "response" message of HTTP which is used in initiating a control communication with the print client of claim 7.

Note: SOAP is an argument resolution protocol (claim 8).

#### **(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

Art Unit: 2625

For the above reasons, it is believed that the rejections should be sustained.


Respectfully submitted,

Conferees:

Edward Coles

Supervisory Patent Examiner

Art Unit 2625

  
EDWARD COLES  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600

Twylar Lamb

Supervisory Patent Examiner


Art Unit 2625

  
Twylar M. Lamb  
Supervisory Patent Examiner

King Y. Poon

Primary Examiner

Art Unit 2625

  
KING Y. POON  
PRIMARY EXAMINER